United States Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act", the

City of Valdez
Wastewater Treatment Plant
800 South Sawmill Road
Valdez, Alaska 99686

is authorized to discharge from a municipal wastewater treatment facility to receiving waters **Unnamed Stream (Alaska Fish and Game Catalog No. 221-60-11390)**, at the following location:

Outfall	Latitude	Longitude
001	61° 6: 45"N	146° 16: 30"W

in accordance with the discharge point, effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective , 2001.

This permit and the authorization to discharge shall expire at midnight, October , 2005.

Signed this day of , 2001.

_____
Director, Office of Water, Region 10
U.S. Environmental Protection Agency

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I. LIMITATIONS AND MONITORING REQUIREMENTS

A. Effluent Limitations

1. During the effective period of this permit, the permittee is authorized to discharge wastewater from outfall 001 to Unnamed Stream No. 221-60-11390, subject to the restrictions set forth herein. This permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application, or any pollutants that are not ordinarily present in such waste streams.

2. The pH range shall be between 6.5 - 8.5 standard units at all times. The permittee shall report the number of excursions during the month with the discharge monitoring report (DMR) for each month.

3. The following effluent limits shall apply at all times:

TABLE 1. EFFLUENT LIMITATIONS

Parameter	Units	Monthly Average	Weekly Average	Maximum Daily	Minimum Daily
BOD_5	mg/L	30	45	60	--
	lbs/day	375	563	751	---
TSS	mg/L	30	45	60	---
	lbs/day	375	563	751	---
Fecal Coliform[1]	FC/100 mL	200[2]	400[3]	800	---
Total Residual Chlorine[1,4]	µg/L	1	---	4	---
	lbs/day	0.02	---	0.05	---
DO	mg/L	---	---	---	7.0

Notes:
1 Reporting is required within 24-hours if the maximum daily limit is violated.
2 Based on the geometric mean of all samples taken in that month.
3 Based on the geometric mean of the two samples taken during the week.
4 The effluent limits for chlorine are not quantifiable using EPA approved analytical methods. The permittee will be in compliance with the effluent limits provided the total chlorine residual is at or below the compliance level of 100 µg/L.

4. BOD Percent Removal. From June 1 through September 30, the average monthly effluent concentration shall not exceed 15 percent of the average monthly influent concentration. From October 1 through May 31, the average monthly effluent concentration shall not exceed 20 percent of the

average monthly influent concentration. The average monthly concentrations for influent and effluent shall be calculated from the arithmetic mean of the individual influent and effluent concentration measurements.

5. TSS Percent Removal. From June 1 through September 30, the average monthly effluent concentration shall not exceed 15 percent of the average monthly influent concentration. From October 1 through May 31, the average monthly effluent concentration shall not exceed 25 percent of the average monthly influent concentration. The average monthly concentrations for influent and effluent shall be calculated from the arithmetic mean of the individual influent and effluent concentration measurements.

6. Chlorine Minimum Level. The effluent limits for total residual chlorine are below detection limits using EPA-approved analytical methods. EPA will use the minimum level (ML) of 100 µg/L as the compliance evaluation level for total residual chlorine.

7. There shall be no discharge of floating solids, debris, sludge, deposits, foam, scum, or other residues of any kind in concentrations causing nuisance, objectionable, or detrimental conditions or that make the water unfit or unsafe for the use.

B. Effluent Monitoring Requirements

1. During the effective period of this permit, the following monitoring requirements shall apply:

TABLE 2: EFFLUENT MONITORING REQUIREMENTS

Parameter	Units	Location	Frequency	Sample Type
BOD_5[1]	mg/L	Influent and Effluent	1/week	24-hour composite
TSS[1]	mg/L	Influent and Effluent	1/week	24-hour composite
Fecal coliform bacteria	FC/100 mL	Effluent	2/week	grab
Total residual chlorine	µg/L	Effluent	2/week	grab
pH	s.u.	Effluent	2/week	grab
DO	µg/L	Effluent	2/week	grab

TABLE 2: EFFLUENT MONITORING REQUIREMENTS				
Parameter	**Units**	**Location**	**Frequency**	**Sample Type**
Flow	mgd	Effluent	continuous	recording
Residue	---	Effluent	1/week	visual
Temperature	°C	Effluent	1/month	grab
Ammonia, total (as N)	mg/L	Effluent	1/month	grab
WET	TU_c	Effluent	1/quarter[2]	24-hour composite

Notes:
1 Influent and effluent composite samples shall be collected during the same 24-hour period.
2 Required during the fourth year of the effective date of the permit only.

2. Effluent samples shall be collected after the last treatment unit prior to discharge.

C. Whole Effluent Toxicity Testing

The permittee shall conduct quarterly chronic toxicity tests on 24-hour composite effluent samples during the fourth year of the permit.

1. Organisms and Protocols

   a. The permittee shall conduct static-renewal tests with the cladoceran, *Ceriodaphnia dubia* survival and reproduction test and the fathead minnow, *Pimephales promelas* larval survival and growth test.

   b. The presence of chronic toxicity shall be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organism*s, Third Edition, EPA-600-4-91-002, July 1994.

2. Results shall be reported in TUc (chronic toxic units). TUc =100/NOEC (in percent effluent).

3. Chronic toxicity testing requirements are triggered when the NOEC exceeds 10 TUc (10 percent effluent concentration). When chronic toxicity testing requirements are triggered, the permittee shall comply with the requirements set out in paragraphs 6 and 7 below.

4. Quality assurance

   a. A series of five dilutions and a control shall be tested. The series shall include the receiving water concentration of 10% effluent concentration. The dilution series shall also include two dilutions above 10%, and two dilutions below 10%.

   b. Concurrent testing with reference toxicants shall also be conducted if organisms are not cultured in-house. Otherwise, monthly testing with reference toxicants is sufficient. Reference toxicants shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration and type).

   c. If the effluent tests do not meet all test acceptability criteria as specified in the manual, then the permittee must re-sample and retest as soon as possible.

   d. Control and dilution water shall be synthetic, moderately hard laboratory water, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water shall also be used. Receiving water may be used as control and dilution water upon notification of EPA. In no case shall water that has not met test acceptability criteria be used as dilution water.

   e. Fresh samples shall be obtained for the renewal of biomonitoring dilution. The effluent data shall be obtained from the composite sample used for day 1 toxicity tests. Test samples for days 1, 3, and 5 will be analyzed for alkalinity, hardness, pH, temperature, dissolved oxygen, total ammonia, and total residual chlorine.

5. Preparation of Initial Investigation Toxicity Reduction Evaluation (TRE) Plan

   a. The permittee shall submit to EPA a copy of the permittee's initial investigation TRE workplan within **180 days of the effective date of this permi**t. This plan shall describe the steps the permittee intends to follow in the event that toxicity, as defined in paragraph C.3 above, is detected, and should include at a minimum:

(1) a description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency;

(2) a description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility; and

(3) a description of who will conduct a toxicity identification evaluation (TIE) if one is necessary.

6. Accelerated testing

a. If chronic toxicity testing requirements as defined in paragraph 3. above are triggered, the permittee shall implement the initial investigation workplan. If implementation of the initial investigation workplan indicates the source of toxicity (for instance, a temporary plant upset), then only one additional test is necessary. If toxicity is detected in this test, then paragraph 6(b) shall apply.

b. If chronic toxicity testing requirements as defined in paragraph 3 above are triggered, then the permittee shall conduct six more tests, bi-weekly (every two weeks), over a twelve-week period. Testing shall commence within two weeks of receipt of the sample results of the exceedance.

7. Toxicity Reduction Evaluation and Toxicity Identification Evaluation

a. If chronic toxicity testing requirements as defined in paragraph 3 are triggered in any of the six additional tests required under 6(b), then, in accordance with the permittee's initial investigation workplan and EPA manual EPA 833 B-99-002 (Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants), the permittee shall initiate a TRE within fifteen (15) days of receipt of the sample results of the exceedance. The permittee will develop as expeditiously as possible a more detailed TRE workplan, which includes:

(1) further actions to investigate and identify the cause of toxicity;

(2) actions the permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and

(3) a schedule for these actions.

b. The permittee may initiate a TIE as part of the overall TRE process described in the EPA acute and chronic TIE manuals EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III).

c. If none of the six tests required under paragraph 6(b) above indicates toxicity, then the permittee may return to the normal testing frequency.

d. If a TIE is initiated prior to completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.

8. Reporting

a. The permittee shall submit the results of the toxicity tests, including any accelerated testing conducted during the month, in TUs with the discharge monitoring reports (DMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and that accelerated testing is unnecessary, pursuant to paragraph 6(a), then the results of the follow-up test shall also be submitted with the DMR for the quarter in which the investigation occurred.

b. The full report shall be submitted by the end of the second month in which the DMR is submitted.

c. The full report shall consist of the results, the dates of sample collection and initiation of each toxicity test, the triggers as defined in paragraph 3 above, the type of activity occurring, the flow rate at the time of sample collection, and the chemical parameter monitoring required for the outfall(s) as defined in the permit.

d. Test results for chronic tests shall also be reported according to Chapter 10, “Report Preparation,” of the manual and shall be attached to the DMR.

D. Ambient Monitoring Requirements

The permittee must conduct ambient water monitoring. Ambient water monitoring is required beginning four (4) months from the effective date of the permit.

1. Ambient monitoring requirements are listed in Table 3.

TABLE 3. AMBIENT MONITORING REQUIREMENTS

Parameter	Units	Sample Frequency	Sample Location	Sample Type
Ammonia, total (as N)	mg/L	1/quarter	Upstream in Unnamed Stream No. 221-60-11390	grab
Fecal coliform bacteria (May 1 - September 31)	FC/100 mL	1/month	3 sites at edge of mixing zone in Port Valdez	grab
Fecal coliform bacteria (October 1 - April 30)	FC/100 mL	1/quarter	3 sites at edge of mixing zone in Port Valdez	grab
Flow	mgd	1/quarter	Upstream in Unnamed Stream No. 221-60-11390	recording
Residue	---	1/quarter	Downstream in Unnamed Stream No. 221-60-11390	visual
pH	s.u.	1/quarter	Downstream in Unnamed Stream No. 221-60-11390	grab
Temperature	°C	1/quarter	Downstream in Unnamed Stream No. 221-60-11390	grab

2. To the extent possible, ambient sampling and analysis shall occur on the same day as effluent sampling and analysis for the same parameters.

3. Fecal coliform monitoring shall occur at the edge of the mixing zone (or as close to the edge of the mixing zone as is practical due to site and access limitations).

4. Mixing Zone. The mixing zone for this discharge shall be defined as the area within a 100 meter radius of the entry point of Unnamed Stream No. 221-60-11390 into Port Valdez. The mixing zone provides a minimum dilution factor of 19:1 for fecal coliform.

5. Downstream monitoring in Unnamed Stream No. 221-60-11390 shall occur 30 meters downstream from the discharge point of the outfall.

6. Quality assurance/quality control plans for all the monitoring must be documented in the Quality Assurance Plan required under Part I.E, ("Quality Assurance Plan").

7. Quarterly monitoring shall be conducted on a calendar quarter (i.e. January to March, April to June, July to September, and October to December).

E. Quality Assurance Plan

The permittee must develop and implement a Quality Assurance Plan (QAP) for all monitoring required by this permit. The plan must be submitted to EPA and Alaska Department of Environmental Conservation (ADEC) within **180 days of the effective date of this permit**. *(Exact date will be specified in final permit).* Any existing QAPs may be modified for submittal under this section.

1. The QAP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the permit and in explaining data anomalies when they occur.

2. Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). The QAP must be prepared in the format which is specified in these documents.

3. At a minimum, the QAP must include the following:

    a. Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.

    b. Map(s) indicating the location of each sampling point.

    c. Qualification and training of personnel.

    d. Name(s), address(es) and telephone number(s) of the laboratories, used by or proposed to be used by the permittee.

4. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.

5. Copies of the QAP must be kept on site and made available to EPA and/or ADEC upon request.

F. Design Criteria Requirement

The design criteria for the permitted facility are as follows:

TABLE 4. DESIGN CRITERIA FOR VALDEZ WWTP

Criteria	Value	Units
Average Annual Flow	1.5	mgd

1. Each month, the permittee shall compute an annual average value for flow entering the facility based on the previous twelve months of data or all data available, whichever is less. If the facility performs plant upgrades that affect the design flow listed in Table 4, only data collected after the upgrade should be used in determining the annual average value.

2. When the average annual value exceeds 85% of the design flow listed in Table 4, the permittee shall develop a facility plan and schedule within one year from the first date of exceedance. EPA and ADEC shall be notified. The plan must include the permittee's strategy for continuing to maintain compliance with effluent limits and will be made available to the Director, ADEC, or EPA authorized representative upon request.

G. Operation and Maintenance Plan Review Requirements

1. Within **180 days of the effective date** of this permit *(exact date will be specified in final permit)*, the permittee shall review its operation and maintenance (O&M) plan and ensure that it includes appropriate best management practices (BMPs). The plan must be reviewed annually thereafter. BMPs include measures which prevent or minimize the potential for the release of pollutants to Unnamed Stream No. 221-60-11390. The O&M Plan shall be retained on site and made available to EPA and ADEC upon request.

2. The permittee shall develop a description of pollution prevention measures and controls appropriate for the facility. The appropriateness and priorities

of controls in the O&M Plan shall reflect identified potential sources of pollutants at the facility. The description of BMPs shall address, to the extent practicable, the following minimum components:

- Spill prevention and control;
- Optimization of chemical usage;
- Preventive maintenance program;
- Research, development and implementation of a public information and education program to control the introduction of household hazardous materials to the sewer system; and
- Water conservation.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling (Routine and Non-Routine Discharges)

Samples and measurements must be representative of the volume and nature of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited in Part I.A. of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with paragraph II.C ("Monitoring Procedures"). The permittee must report all additional monitoring in accordance with paragraph II.D ("Additional Monitoring by Permittee").

B. Reporting of Monitoring Results

1. Effluent Reporting Requirements

   a. Monitoring results shall be summarized each month on the DMR. The reports shall be submitted monthly and are to be postmarked by the 10th day of the following month. Quarterly monitoring shall be reported with the following month's DMR.

   b. Legible copies of the DMR and all other reports shall be signed and certified in accordance with the **Signatory Requirements** (See Section V.J) of this permit.

2. Ambient water reporting requirements summarizing each sampling event shall be submitted to EPA and ADEC annually by September 15. Each report shall include results from the receiving water sampling as well as the daily effluent flow from the treatment plant on the day of sampling.

3. Submittal of Monitoring Results and Reports

   a. Monitoring results and reports required under Sections II.B, C and D of this permit shall be submitted to the Director, Office of Water and the State agency at the following addresses:

   original to: United States Environmental Protection Agency (EPA)
   Region 10
   NPDES Compliance Unit
   1200 Sixth Avenue, OW-133
   Seattle, Washington 98101

   copy to: Alaska Department of Environmental Conservation
   Division of Air and Water Quality
   555 Cordova Street
   Anchorage, Alaska 99503
   (907)269-7523
   (907)269-7508 fax

C. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit.

D. Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136, or as specified in this permit, the permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.

Upon request by the Director, the permittee must submit results of any other sampling, regardless of the test method used.

E. Records Contents

Records of monitoring information must include:

1. the date, exact place, and time of sampling or measurements;
2. the name(s) of the individual(s) who performed the sampling or measurements;
3. the date(s) analyses were performed;
4. the names of the individual(s) who performed the analyses;
5. the analytical techniques or methods used; and
6. the results of such analyses.

F. Retention of Records

The permittee must retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director or ADEC at any time.

G. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee must report the following occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances:

    a. any noncompliance that may endanger health or the environment;

b. any unanticipated bypass that exceeds any effluent limitation in the permit (See Part IV.H, "Bypass of Treatment Facilities");

c. any upset that exceeds any effluent limitation in the permit (See Part IV.I, "Upset Conditions");

d. any violation of a maximum daily discharge limitation for fecal coliform and chlorine in Table 1 of Part I; or

e. any overflow prior to the treatment works (i.e. sanitary sewer overflow), whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

2. The permittee must also provide a written submission within five days of the time that the permittee becomes aware of any event required to be reported under subpart 1, above. The written submission must contain:

a. a description of the noncompliance and its cause;

b. the period of noncompliance, including exact dates and times;

c. the estimated time noncompliance is expected to continue if it has not been corrected;

d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and

e. if the non compliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

3. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Hotline in Seattle, Washington, by telephone, (206) 553-1846.

4. Reports must be submitted to the addresses in Part II.B ("Reporting of Monitoring Results").

H. Other Noncompliance Reporting

The permittee must report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Part II.B

("Reporting of Monitoring Results") are submitted. The reports must contain the information listed in Part II.G.2 of this permit ("Twenty-four Hour Notice of Noncompliance Reporting").

I. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

III. SLUDGE MANAGEMENT REQUIREMENTS

The permittee shall ensure that an updated biosolids permit application (Form 2S) is on file with the EPA.

IV. COMPLIANCE RESPONSIBILITIES

A. Inspection and Entry

The permittee shall allow the Director or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

B. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for: enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. The permittee shall give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

C. Penalties for Violations of Permit Conditions

1. Civil and Administrative Penalties. Any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be subject to a civil or administrative penalty, not to exceed the maximum amounts authorized by Sections 309(d) and 309(g) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note).

2. Criminal Penalties

   a. Negligent Violations. Any person who negligently violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(1) of the Act.

   b. Knowing Violations. Any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(2) of the Act.

   c. Knowing Endangerment. Any person who knowingly violates a permit condition implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine and/or imprisonment as specified in Section 309(c)(3) of the Act.

   d. False Statements. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly

falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(4) of the Act.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize, or prevent, any discharge, or sludge use or disposal, in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed, or used, by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

G. Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment or control of waste waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

H. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section.

2. Notice

   a. Anticipated Bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass.

   b. Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required under **Twenty-four Hour Notice of Noncompliance Reporting** (See Section II.G).

3. Prohibition of Bypass

   a. Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass, unless:

      (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      (3) The permittee submitted notices as required under paragraph 2 of this section.

   b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determined that it will meet the three conditions listed above in paragraph 3.a of this section.

I. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph 2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

2. Necessary upset demonstration conditions. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;

   b. The permitted facility was at the time being properly operated;

   c. The permittee submitted notice of the upset as required under **Twenty-four Hour Notice of Noncompliance Reporting** (See Section II.G); and

   d. The permittee complied with any remedial measures required under **Duty to Mitigate** (See Section IV.E).

3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

V. GENERAL REQUIREMENTS

A. Notice of New Introduction of Pollutants

1. The permittee shall provide adequate notice to the Director, Office of Water, and ADEC of:

   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to sections 301 or 306 of the Act if it were directly discharging those pollutants, and

   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

2. For the purposes of this section, adequate notice shall include information on:

   a. The quality and quantity of effluent to be introduced into such treatment works, and

b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.

B. Control of Undesirable Pollutants

Under no circumstances shall the permittee allow introduction of the following wastes into the waste treatment system:

1. Wastes which will create a fire or explosion hazard in the treatment works;

2. Wastes which will cause corrosive structural damage to the treatment works, but in no case, wastes with a pH lower than 5.0, unless the treatment works is designed to accommodate such wastes;

3. Solid or viscous substances in amounts which cause obstructions to the flow in sewers, or interference with the proper operation of the treatment works;

4. Waste waters at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency; and

5. Any pollutant, including oxygen demanding pollutants (e.g., BOD, etc.) released in a discharge of such volume or strength as to cause interference in the treatment works.

C. Requirements for Industrial Users

The permittee shall require any industrial user of these treatment works to comply with any applicable requirements of sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR 403.

D. Planned Changes

The permittee shall give notice to the Director and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility (e.g., change in disinfection method). Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit. Notice is also required when the alteration or addition results in a significant change in the permittee's sludge use or disposal

practices, including notification of additional use or disposal sites not reported during the permit application process.

E. Anticipated Noncompliance

The permittee shall give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

F. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and re-issuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

G. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.

H. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

I. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director or ADEC, it shall promptly submit such facts or information.

J. Signatory Requirements

1. All applications, reports, or information submitted to the Director shall be signed and certified.

2. All permit applications shall be signed by either a principal executive officer or ranking elected official.

3. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described above and submitted to the Director, and

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

4. Changes to authorization. If an authorization under **Signatory Requirements** (See Section V.J) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section V.J must be submitted to the Director prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

5. Certification. Any person signing a document under this section shall make the following certification:

   "*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*"

K. Availability of Reports

Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Director. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

L. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the Act.

M. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private infringement of federal, state, or local laws or regulations.

N. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

O. Transfers

This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date;

2. The notice includes a written agreement between the existing and new permittee's containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.

P. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the Act.

Q. Reopener Provision

This permit is subject to modification, revocation and reissuance, or termination at the request of any interested person (including the permittee) or upon EPA initiative. However, permits may only be modified, revoked or reissued, or terminated for the reasons specified in 40 CFR § 122.62, 122.63 or 122.64, and 40 CFR § 124.5. This includes new information which was not available at the time of permit issuance and would have justified the application of different permit conditions at the time of issuance and includes, but is not limited to, future monitoring results. All requests for permit modification must be addressed to EPA in writing and shall contain facts or reasons supporting the request.

VI. DEFINITIONS

"Act" means the Clean Water Act

"Ambient monitoring" means receiving water monitoring.

"Annual Average" means the sum of all values reported in a twelve month period divided by the number of values.

"Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

"Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

"Best Management Practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

"Chronic toxicity" measures a sublethal effect (e.g., reduced growth, reproduction) in an effluent or ambient waters compared to that of the control organisms.

"Chronic toxic unit (TUc)" is a measure of chronic toxicity. The number of chronic toxic units in the effluent is calculated as 100/NOEC, where the NOEC is measured in percent effluent.

"Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

"Geometric mean" means the "n"th root of the product of "n" samples collected during the month, where n refers to the number of samples collected in the month.

A "Grab" sample is a single sample or measurement taken at a specific time or over as short a period of time as is feasible.

"Maximum daily discharge limitation" means the highest allowable "daily discharge".

"Minimum level (ML)" is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes and processing steps have been followed.

"No observed effect concentration (NOEC)" is the highest concentration of toxicant to which organisms are exposed in a chronic test, that causes no observable adverse effect on the test organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are not statistically significant different from controls.)

"Pathogen" means an organism that is capable of producing an infection or disease in a susceptible host.

"Pollutant", for the purposes of this permit, is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organisms that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food-chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"Sewage sludge" means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage and/or a combination of domestic sewage and industrial waste of a liquid nature in a Treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the incineration of sewage sludge or grit and screenings generated during preliminary treatment of domestic sewage in a Treatment Works. These must be disposed of in accordance with 40 CFR 258.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

A "24-hour composite" sample shall mean a flow-proportioned mixture of not less than eight discrete aliquots. Each aliquot shall be a grab sample of not less than 100 mL and shall be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.

VII. ACRONYMS

ADEC	Alaska Department of Environmental Conservation
BMPs	Best management practices
BOD_5	Biochemical oxygen demand, five-day
°C	Degrees Celsius
CFR	Code of Federal Regulations
DMR	Discharge Monitoring Report
DO	Dissolved oxygen
EPA	U.S. Environmental Protection Agency
FC	Fecal coliform
lbs/day	Pounds per day
mg/L	Milligrams per liter
ML	Minimum Level
µg/L	Micrograms per liter
mgd	Million gallons per day
N	Nitrogen
NOEC	No observed effect concentration
NPDES	National Pollutant Discharge Elimination System
OW	Office of Water
O&M	Operations and maintenance
POTW	Publicly owned treatment works
QAP	Quality assurance plan
TIE	Toxicity Identification Evaluation
TRE	Toxicity Reduction Evaluation
TSS	Total suspended solids
TUc	Toxic units (chronic)
WET	Whole effluent toxicity
WLA	Wasteload allocation
WQBEL	Water quality-based effluent limit
WWTP	Wastewater treatment plant